

EXERCISE BICYCLE VIRTUAL REALITY STEERING APPARATUS

ABSTRACT OF THE DISCLOSURE

A steering apparatus for altering steering direction of an exercise bicycle utilizing an interactive computer or television video game simulation which consists of a steering mechanism primary frame (22) that includes a steering tube (24) and a steering plate (26). The steering tube is disposed within an exercise bicycle frame head. A steer frame (58) is rotatably mounted within the primary frame and utilizes a pair of springs (60) that are suspended between the primary frame and the steer frame. Changing steering direction by rotation of the handlebar (70) attached to the steer frame creates progressively linear resistance to the handlebar movement. The steer frame returns to a centered position when unrestrained, duplicating the feel and impression of riding a bicycle. A potentiometer (32) interfaces with the rotating steer frame providing variable electrical resistance relative to the directional movement of the steer frame to the primary frame. An electrical signal is transmitted from an interactive computer or television video game to the potentiometer which interprets the actual steering position of the exercise bicycle.